

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

UNITHERM Food Systems, Inc.
Cooking Trial Data

Product: 100% Beet		Supplied By: Bob Wood		Date: 7/3			
Test #	Belt Speed	Cook Time	Start Weight	Cooked Weight	Yield	Internal Temp. F.	Remarks
		Temperature C.	Zone 1	Zone 2			
#1	35.0	8.0	600	650		44°	NETTED PRODUCT 5 MOZ @ 302.24
#2	46.0	6.0	600	650		44.0	TOO DRY
#3	DAV NCU A/W						
#4	37.0	3.0	600	650			
#5							
#6							

NOTES

#1
#2
#3
#4
#5
#6

U-04193

PTO-004157

UNITHERM Food Systems, Inc.

Cooking Trial Data

Product:

Cup O' Haw

Test #	Belt Speed	Cook Time	Temperatures C.		Start Weight	Cooked Weight	Yield	Internal Temp. F.	Supplied By:	Remarks
			Zone 1	Zone 2						
#1	70.	48 min	600	650				44	30%	24 P
#2	90	34 min	600	650				44	30%	24 P
#3										
#4										
#5										
#6										

NOTES

#1

#2

#3

#4

#5

#6

U-04194

PTO-004158

Unitherm

10-14-97

- * Bank should be coated before removing nets
to ease their removal.
- * Cr. is built
 - CIP 10' x 10' x 10'
 - Intra Red rod in visor
 - Auto loader complete end of this week
- * Central feed bay can be located on Modar
- * Weather tag will be necessary in the 1st week of November
- * Full operation not planned until 15th week in December
- * *** Red Harbor or Unitherm we will build Derrigait tanks ***
- * Bag removal won't be complete until early next week
- * 30 minutes for ferment
 - Welds?
 - Juice collecting
 - Cost of cutting blocks
 - Tank washer for bag slitter will accumulate protein
 - ↳ plumb water to bag washer
 - Who is building table
- * 7 layers of 5' x 10' x 10' stuff

Confidential
Restricted Access
U-06962

PTO-004159

+ After HMT their last step process
is V.E

**Confidential
Restricted Access
U-06963**

6243 -> 700 - W. 9.38 10
9.26

10:22.4 40.42 116
Fist

25000 8m/s 1136.4 50 Hz 1139.1

Wt pt. Wt. at 11⁰
1400g 1400g
SMB 1000g 1000g
11:39.11 55.72 11:45.50

Not turned (Weight lot 5.920
8.885

8243.5 7882

10.2465
10.275 after strip

**Confidential
Restricted Access
U-06964**

PTO-004161

10-51
3.2

Weight	Temp	Depth	Time
9.935	340.30	1.12.30	1.145.5
10.195	1040.00	1.00.30	1.145.5
10.575			
10.520			
10.185			
10.615			
10.740			
10.69			

After 100%
100%

2.69	92.4	9.675	1	2	
2.59	92.5	9.940	1.972m	3	4
3.69	96.4	10.190	1.930	<u>100</u>	
92.6	10.372				
97.3	9.855				
97.8	10.015		TOP 6.0m		
97.6	10.020				
96.9	10.355		Surface Temp	72° F	

2168
285

Confidential
Restricted Access
U-06965

PTO-004162

1000-02
E-46 1011

9.585 12:55:20 12:56:15 12:58:31
9.905

9.34
9.640

Confidential
Restricted Access
U-06966

PTO-004163

Ovens

- Belt wash to be set at end of ovens.
- 7' extension on oven track to go through walls

Bag Slitter

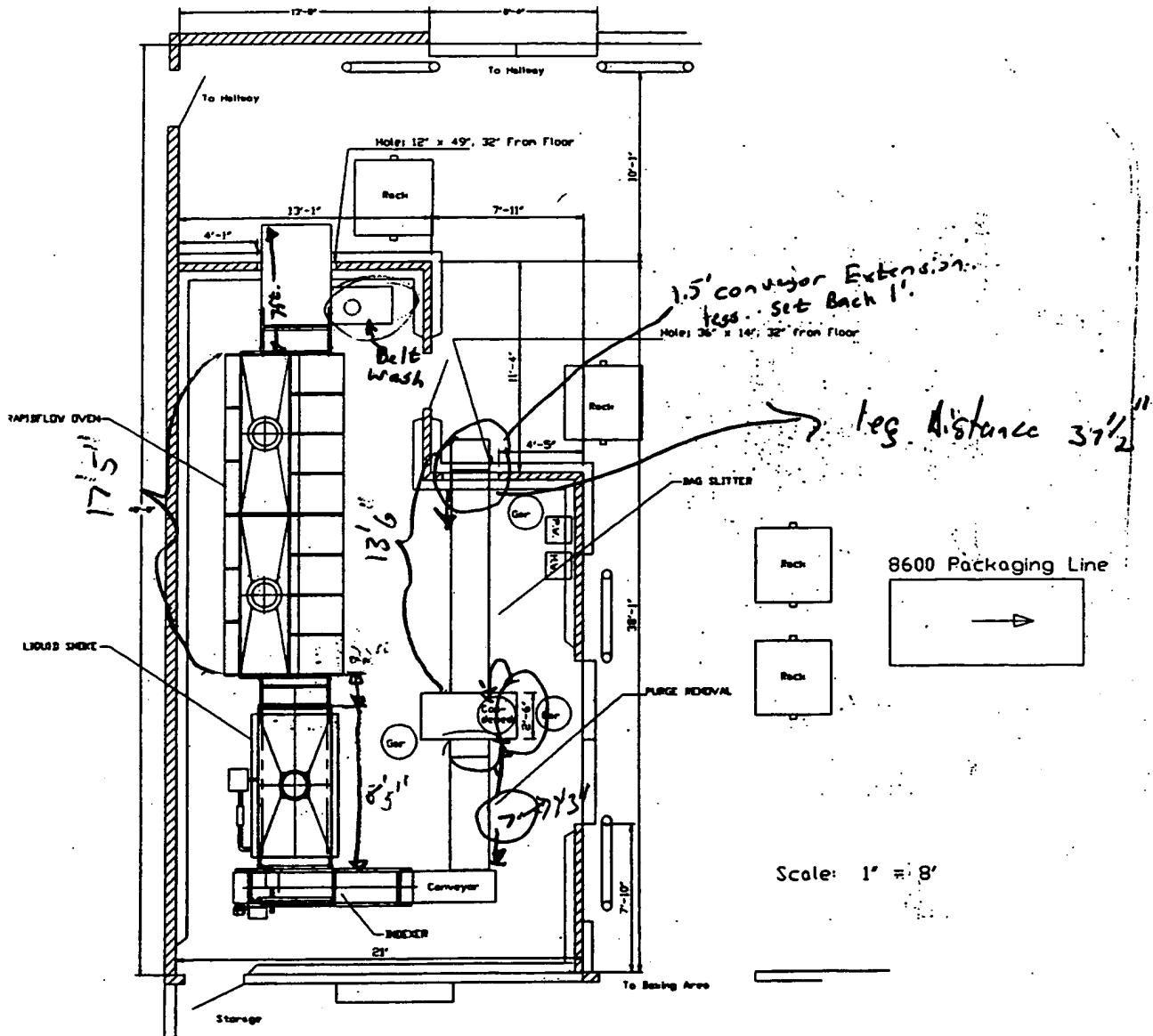
- Condensed Barrel fits under table.
- Extend 15' to go through wall.
 - legs set back 1' to accomodate for I.R.
 - Being longer. By 1'
- Pan under knife to catch Purge
- Check on how easy or hard the bags come off.

Liquid Smoke applicator

- Red Arrow. Suggested changes.
- 2 overnight storage tanks.

	Net/Net		Skinned/Skinless
7001	Net	MESS	Skinned
7002	Net	HICK	Skinned
8246-32	No Net	MIS	Skinned
8246-02	No Net	HICK	Skinned
8243	With net	MESS	Skinned
8244-02	With net	HICK	Skinned
8247	No net	MIS	No Skin
8246	No net		No Skinned
7001	No net	MESS	Skinned

Confidential
Restricted Access
U-06967



**Confidential
Restricted Access
U-06968**

PTO-004165

Hormel Foods Research Report

Attendee: W. Thielen - CO L. Huston - CO

Project Name: CURE-81 Hams processed at Unitherm

Copy List:

M. Benson - R&D	G. Ray - CO	C. Cornell - CO
D. Ruzek - R&D	R. Slavik - CO	
G. Paxton - CO	J. Swedberg - CO	

Written By: S. Hoevet - 5822 J. Ulrich - 5810 J.U./jh

Objective:

Evaluate CURE-81® hams further processed at Unitherm

Summary:

A cutting was held at R&D on October 21, 1997. Those attending were F. Dryden, W. Thielen, D. Ruzek, L. Huston, G. Paxton, C. Cornell, G. Ray, J. Swedberg, R. Slavik and J. Ulrich.

Product shown:

CURE-81® control

CURE-81® hour smoke only

Test #1: No preheat, 1.5 min. liquid smoke with RA24 at 25%, 3 min. cook

Test #2: 50 sec. preheat, 1.5 min. liquid smoke with RA24 at 25%, 3 min. cook

Test #3: 30 sec. preheat, 1.5 min. liquid smoke with RA24 at 25%, 3 min. cook

Test #4: 30 sec. preheat, 1.5 min. liquid smoke with RA24 at 30%, 3 min. cook

Test #3 was selected as having the best color. Color tone and consistency were excellent. Negatives included a thicker rind and a bitter taste to the rind.

Recommendation:

1. Drop the smoke concentration to 15% or 20% to eliminate bitter taste
2. If color is comparable, eliminate the preheat to reduce the rind
3. For maximum shelf life:
 - a. process from cold
 - b. connect oven to chill tunnel to reduce surface temperature
 - c. package immediately

Jennie-O is buying a Unitherm unit which may be available for further testing. Steve Hoevet suggests additional testing be done at Unitherm with a large quantity of hams to test out the above recommendations.

All product from Test #3 was put into the shelf life cooler.

SMOKE CYCLE

TIME	DRY BULB	WET BULB	
:45	140	120	
:60	150	125	Wood Smoke
:90	150	130	
:90	160	140	
:60	170	150	
:-	170	170	Steam Cook to IT 148° - 150°F

pjh (14205)

Confidential
Restricted Access
U-06861

W/NETS

UNITHERM Food Systems, Inc.

Cooking Trial Data

T t #	Belt Speed	Product: FRENCH FRIES			Supplied By: ENER-E - C	
		Cook Time	Start Weight	Cooked Weight		
Slow	Zone 1	Zone 2				
#1	45.00	600	650			SMOKE: SELECT 24" 30% NET/SPRINKLERS T.A.GRILL: 40 SEC.
#2	38.00	525	600			24" 30% GRILL 45SEC. TIGHTEN LIGHT SPRAY
#3	38.00	525	600			
#4	35.01	475	550			AUTOMATIC SMOKE APPICATOR @ 55% 30% 24" IR GRILL F.A.T 35.00
#5						
#6						

NOTES

- #1 DID NOT WORK - REVERSED MARKS LOWER TEMPERATURE
- #2 BETTER - STILL NOT THERE TRY SMOKE SPRAY
- #3 SAME
- #4 PROGRESS! TRY SAME THERM
- #5
- #6

U-04260

PTO-004167

UNITERM Food Systems, Inc.**Cooking Trial Data**

Test #	Belt Speed	Cook Time	Start Temperature C.	Product: Whole Hams		Internal Temp. F.	Remarks
				Zone 1	Zone 2		
#1	55 hz	5 min.	600	650	4.98	4.835	97.09% Pre-cook 39 post-cook 39 50% Charsol
#2		5 min.	550	650	8.03	5.995	98.76% 50% Charsol
#3		5 min.	550	650	6.98	6.77	98.99% 30% Charsol
#4	60 hz	4.5 min.	500	650	7.15	6.95	97.20% 30% Charsol
#5							
#6							
NOTES							
#1							
#2							
#3							
#4							
#5							
#6							

U-8106

CONFIDENTIAL-ATTORNEY ONLY

PTO-004168